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What is claimed is:

1. A system for protecting a power semiconductor output stage that, as a function of a control signal, connects an inductive load to a direct-current supply voltage and disconnects it therefrom, wherein the disconnection energy ($W = 1/2 LI^2$) occurring at the inductive load (L, L1, L2) upon disconnection can be transferred in transformer fashion to an additional inductance (Lz, L2, L1) that is loaded with a resistance (R) or is coupled in the countercurrent direction to the direct-current supply voltage (Ubatt).
2. The system as defined in Claim 1, wherein the inductive load (L) and the additional inductance (Lz) are configured as coils wound in opposite directions having a common magnetic circuit (Figure 1).
3. The system as defined in Claim 1, wherein in the context of an electronically commutatable motor, the additional inductance for an energized excitation winding (e.g. L1) is the oppositely energized excitation winding (L2) that is respectively next in the commutation cycle.
4. The system as defined in one of Claims 1 through 3, wherein the power semiconductor output stages (T, T1, T2) are low-side-connected N-channel MOSFETs.